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EXAMINER

MOON, SEOKYUN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

The Applicant's arguments filed May 23, 2011 have been fully considered.

The Applicant asserts [p. 2], "*Claims 21-35 and 37-39 are subject to examination.*". However, as disclosed in the final Office action mailed February 24, 2011, claims 29-35 are withdrawn from the examination. Accordingly, Examiner respectfully submits that only claims 21-28 and 37-39 are subject to examination.

Regarding the rejection of claims under 35 U.S.C. 112, first paragraph, the Applicant argues [pp. 5-7], "*Fig. 13 and page 13, lines 19-27 provide support for the claimed limitation.*" and "*For any modulation value U1, U2, or U3, the filter's functional areas have substantially different spectrum than all emission spectra of said light source.*".

Examiner respectfully disagrees.

Page 13 lines 19-27 of the specification of the instant Application discloses,

When the modulation means 640 powers the light-emitting diode 630 with voltage U1, the light source emits light rays with wavelengths of between 400 and 500 nanometers. The light rays emitted by the light source pass through filter 612 outside the symbol represented by this filter and **are absorbed within the symbol because its absorption spectrum corresponds to the emission spectrum of light-emitting diode 630.** Then the remaining rays pass through filters 613 and 614 just as well within the shape of the symbol carried by these filters as they do outside the symbol because these filters are transparent in the emission spectrum of light-emitting diode 630. For key 610, the visible symbol is therefore the symbol carried by filter 612, in this case "1", which appears in black on a blue-violet background.

As very clearly explained above, the filter's functional area must have a same spectrum with at least one of all emission spectra of the light source. Figure 13B shows the spectrum of the filters 612 and 622, having an absorption spectrum which is same as the spectrum emitted with the modulation value of U1 shown in figure 13A and having a light-bypassing spectrum which is

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same as the spectrum emitted with the modulation values of U2 and U3 shown in figure 13A. Similarly, figure 13C shows the spectrum of the filters 613 and 623, having an absorption spectrum which is same as the spectrum emitted with the modulation value of U2 shown in figure 13A and having a light-bypassing spectrum which is same as the spectrum emitted with the modulation values of U1 and U3. Figure 13D shows the spectrum of the filters 614 and 624, having an absorption spectrum which is same as the spectrum emitted with the modulation value of U3 shown in figure 13A and having a light-bypassing spectrum which is same as the spectrum emitted with the modulation values of U1 and U2. Thus, figures 13A-D of the instant invention support the Examiner's position that the filter's functional area must have a same spectrum with at least one of all emission spectra of the light source. If one filter's functional areas have substantially different spectrum than all emission spectra of a light source, then light corresponding to any one of said all emission spectra of said light source would pass through said one filter's functional areas and thus there would be no use for using said one filter. Accordingly, it is required for any one of filters' functional areas to have a spectrum which is same as at least one of all emission spectra of the light source.

Regarding the rejection of claim 21 under 35 U.S.C. 103(a), the Applicant argues [p. 8], *"Therefore, it is clear the area of the red tinted layer 3 of the transparent display plate 1, which is outside the display symbol 2, does not have a different spectrum than that of the red light bulb 7, but rather has the same spectrum ..."*.

Examiner respectfully disagrees.

It appears that the Applicant's argument is based on the assumption that the spectrum of the functional areas of the filter is the light-bypassing spectrum of the functional areas. However,

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as very clearly explained on page 3 of the final Office action, Examiner construed the absorption spectra of the functional areas of the filter as the claimed spectrum of the functional areas of the filter. Examiner respectfully submits that such interpretation is broad because 1) the claim does not specify what the spectrum of the functional areas of the filter is and 2) even the claimed subject matter is not supported by the specification and the figures of the instant Application. Since the absorption spectrum of the functional area of the "*display plate 1*" of Maeda is different from the emission spectrum of red light source, it would be reasonable to conclude that Maeda teaches the claim limitation, "*at least one filter's functional areas have substantially different spectrum than all emission spectra of said light source, for different modulation values of the modulator*".

For the similar reasons, Examiner respectfully submits that the Applicant's argument with respect to the rejection of claim 27 is not persuasive.

The Applicant's argument [p. 5 and p. 9] with respect to the rejection of claim 25 under 35 U.S.C. 103(a) has been fully considered and is persuasive. Therefore, the rejection has been withdrawn. Examiner respectfully reminds the Applicant that withdrawing the rejection does not confirm the allowability of the claim. A further consideration of the patentability of the claim will be made later, in response to the Applicant's remarks with respect to the Examiner's above argument.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 572-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 22, 2011

/Seokyun Moon/

Primary Examiner, Art Unit 2629